Issuance Date: July 25, 2002
Effective Date: June 30, 2003
Expiration Date: June 30, 2008

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA0000281

State of Washington
DEPARTMENT OF ECOLOGY
Olympia, Washington 98504-7600

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

Noveon Kalama, Inc.
1296 Third Street Northwest
Kalama, WA 98625

Facility Location: 1296 Third Street Northwest Kalama, Washington	Receiving Water: Columbia River at Mile 74
Industry Type: Industrial Organic Chemicals, SIC 2869 Cyclic Organic Crudes and Intermediates and Organic Dyes and Pigments, SIC 2865	Discharge Location: Latitude: 46° 01' 18" N Longitude: 122° 51' 35" W

is authorized to discharge in accordance with the special and general conditions which follow.

Kelly Susewind, P.E.
Southwest Region Manager
Water Quality Program
Washington State Department of Ecology

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GENERAL CONDITIONS

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.A	Discharge Monitoring Report	Monthly	August 30, 2003
S3.E	Noncompliance Notification	As necessary	
S4.B	Reporting Bypasses	As necessary	
S5.A.1	Pollution Prevention Plan, Phase I	1/permit cycle	June 30, 2004
S5.A.2	Pollution Prevention Plan, Phase II	1/permit cycle	June 30, 2005
S5.G.2	Pollution Prevention Plan Progress Report	Annually	June 30, 2006
S6.	Spill Plan	1/permit cycle & As necessary	October 30, 2003
S8.A	Acute Toxicity Characterization Data	Quarterly	October 30, 2003
S8.A	Acute Toxicity Tests Characterization Summary Report	1/permit cycle	August 31, 2004
S8.C	Acute Toxicity Compliance Monitoring Reports	As necessary	
S8.D	Acute Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S8.D	Acute Toxicity TI/TRE Plan	As necessary	
S9.A	Chronic Toxicity Characterization Data	Quarterly	October 30, 2003
S9.A	Chronic Toxicity Tests Characterization Summary Report	1/permit cycle	August 31, 2004
S9.C	Chronic Toxicity Compliance Monitoring Reports	As necessary	
S9.D	Chronic Toxicity: "Causes and Preventative Measures for Transient Events."	As necessary	
S9.D	Chronic Toxicity TI/TRE Plan	As necessary	
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G21	Notice of Planned Changes	As necessary	
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SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

A. Non-contact Cooling Water and Process Wastewater Discharges

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit.

The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge at the permitted location subject to complying with the following limitations:

1. Outfall 001 (direct discharge to the Columbia River)—non-contact cooling water plus effluent from outfall 002

	EFFLUENT LIMITATIONS: OUTFALL # 001
Parameter	**Maximum Daily[a]**
Temperature	40.7 degree Celsius

[a] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

2. Outfall 002—effluent from the wastewater treatment plant

Parameter	**Units**	**EFFLUENT LIMITATIONS: OUTFALL # 002**	
		Maximum Daily[a,d]	**Average Monthly[b,d]**
pH[c]	Standard units	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
5-day Biochemical Oxygen Demand (BOD_5)	Pounds per day (lb/d)	277	104
Total Suspended Solids (TSS)	lb/d	412	127
Copper	lb/d	1.54	0.67
Nickel	lb/d	1.13	0.50
Zinc	lb/d	1.19	0.49
Phenol	lb/d	0.125	0.072
Bis(2-ethylhexyl) phthalate	lb/d	1.340	0.495

Parameter	Units	EFFLUENT LIMITATIONS: OUTFALL # 002	
		Maximum Daily[a,d]	Average Monthly[b,d]
Toluene	lb/d	0.384	0.125
Benzene	lb/d	0.653	0.178
Ethylbenzene	lb/d	0.519	0.154
Fluorene	lb/d	0.283	0.106
Naphthalene	lb/d	0.283	0.106
Acenaphthene	lb/d	0.283	0.106
Acrylonitrile	lb/d	1.163	0.461
Carbon Tetrachloride	lb/d	0.183	0.086
Chlorobenzene	lb/d	0.135	0.072
1,2,4-Trichlorobenzene	lb/d	0.673	0.327
Hexachlorobenzene	lb/d	0.135	0.072
1,2-Dichloroethane	lb/d	1.014	0.327
1,1,1-Trichloroethane	lb/d	0.259	0.101
Hexachloroethane	lb/d	0.259	0.101
1,1-Dichloroethane	lb/d	0.283	0.106
1,1,2-Trichloroethane	lb/d	0.259	0.101
Chloroethane	lb/d	1.287	0.500
Chloroform	lb/d	0.221	0.101
2-Chlorophenol	lb/d	0.471	0.149
1,2-Dichlorobenzene	lb/d	0.783	0.370
1,3-Dichlorobenzene	lb/d	0.211	0.149
1,4-Dichlorobenzene	lb/d	0.135	0.072
1,1-Dichloroethylene	lb/d	0.120	0.077
1,2-trans-Dichloroethylene	lb/d	0.259	0.101
2,4-Dichlorophenol	lb/d	0.538	0.187
1,2-Dichloropropane	lb/d	1.105	0.735
1,3-Dichloropropylene	lb/d	0.211	0.139
2,4-Dimethylphenol	lb/d	0.173	0.086
2,4-Dinitrotoluene	lb/d	1.369	0.543
2,6-Dinitrotoluene	lb/d	3.079	1.225
Fluoranthene	lb/d	0.327	0.120
Methylene Chloride	lb/d	0.428	0.192
Methyl Chloride	lb/d	0.913	0.413
Hexachlorobutadiene	lb/d	0.235	0.096
Nitrobenzene	lb/d	0.327	0.130
2-Nitrophenol	lb/d	0.331	0.197
4-Nitrophenol	lb/d	0.596	0.346
2,4-Dinitrophenol	lb/d	0.591	0.341
4,6-Dinitro-o-cresol	lb/d	1.331	0.375
Di-n-butyl phthalate	lb/d	0.274	0.130
Diethyl phthalate	lb/d	0.975	0.389
Dimethyl phthalate	lb/d	0.226	0.091
Benzo(a)anthracene	lb/d	0.283	0.106
Benzo(a)pyrene	lb/d	0.293	0.110

Parameter	Units	EFFLUENT LIMITATIONS: OUTFALL # 002	
		Maximum Daily[a,d]	Average Monthly[b,d]
3,4-Benzofluoranthene	lb/d	0.293	0.110
Benzo(k)fluoranthene	lb/d	0.283	0.106
Chrysene	lb/d	0.283	0.106
Acenaphthylene	lb/d	0.283	0.106
Anthracene	lb/d	0.283	0.106
Phenanthrene	lb/d	0.283	0.106
Pyrene	lb/d	0.322	0.120
Tetrachloroethylene	lb/d	0.269	0.106
Trichloroethylene	lb/d	0.259	0.101
Vinyl Chloride	lb/d	1.287	0.500

[a] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

[b] The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. If only one sample is taken during the calendar month, the maximum daily effluent limitation applies to that sample.

[c] Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.

[d] When sample measurements for compliance with mass-based limits fall below the method detection level (MDL), the average loading shall be calculated using a concentration value of zero and the maximum loading shall be calculated using the MDL value.
When sample measurements for compliance with mass-based limits fall above the MDL, the average and maximum loading shall be calculated using the measured concentration.

B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

1. Outfall 001

   a. The acute mixing zone (AMZ) at a 32.5 feet downstream from each discharge port, with an upstream boundary 10.0 feet upstream of the nearest diffuser port. The resulting dilution factor is 8.3.
   b. The chronic mixing zone (CMZ) at a 325 foot downstream from each discharge port, with an upstream boundary 100 feet upstream of the nearest diffuser port. The resulting dilution factor is 21.1.

2. Outfall 002

   a. The acute mixing zone (AMZ) at a 32.5 feet radius from each discharge port, with an upstream boundary 10.0 feet upstream of the nearest diffuser port. The resulting dilution factor is 270.

b. The chronic mixing zone (CMZ) at a 325 foot radius from each discharge port, with an upstream boundary 100 feet upstream of the nearest diffuser port. The resulting dilution factor is 678.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Effluent	Flow	Millions of gallons per day (mgd)	Outfall 001	Continuous[1]	Metered & Recorded
	Temperature	Degree Celsius	Outfall 001	Continuous	Metered & Recorded
	Toluene	µg/L	Outfall 001	Monthly	Grab
	Arsenic[2]	µg/L	Outfall 001	Quarterly	Grab
	PCB 1254	µg/L	Outfall 001	Quarterly	Grab
Wastewater Effluent	Flow	mgd	Outfall 002	Continuous	Metered & Recorded
	pH	Standard unit	Outfall 002	Continuous	Metered & Recorded
	5-day Biochemical Oxygen Demand (BOD_5)	Milligrams per liter (mg/l) and pounds per day (lb/d)	Outfall 002	Weekly	24-hour composite (24HC)
	Total Suspended Solids (TSS)	mg/l & lb/d	Outfall 002	Weekly	24HC
	Copper	Micrograms per liter (µg/l) & lb/d	Outfall 002	Monthly	24HC
	Nickel	µg/l & lb/d	Outfall 002	Monthly	24HC
	Zinc	µg/l & lb/d	Outfall 002	Monthly	24HC
	Phenol	µg/l & lb/d	Outfall 002	Monthly	Grab
	Bis(2-ethylhexyl) phthalate	µg/l & lb/d	Outfall 002	Monthly	24HC
	Toluene	µg/l & lb/d	Outfall 002	Quarterly	Grab
	Benzene	µg/l & lb/d	Outfall 002	Quarterly	Grab
	Ethylbenzene	µg/l & lb/d	Outfall 002	Quarterly	Grab
	Fluorene	µg/l & lb/d	Outfall 002	Quarterly	24HC
	Naphthalene	µg/l & lb/d	Outfall 002	Quarterly	24HC

[1] Continuous means uninterrupted - except for brief lengths of time for calibration, power failure, or for unanticipated equipment repair or maintenance. Sampling shall be taken daily when continuous monitoring is not possible.
[2] Method number 200.8

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Receiving Water	Bis(2-ethylhexyl) phthalate	µg/l	Columbia River[4]	Quarterly	Grab
	Arsenic[5]	µg/L	Columbia River	Quarterly	Grab
	PCB 1254[6]	µg/L	Columbia River	Quarterly	Grab
Acute Toxicity Testing			Outfall 001	Sea Special Condition S8.	
Chronic Toxicity Testing			Outfall 001	Sea Special Condition S9.	

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement. Conductivity and pH shall be accredited if the

[4] Cooling water intake pipe upstream from the water filters
[5] Method number 200.8
[6] Method number 608

laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

E. Monitoring Waiver

The Department waives routine monitoring of the following pollutants. Sampling and analysis will be reviewed for each application for renewal or major modification:

1. Acenaphthene
2. 1,2,4-Trichlorobenzene
3. Hexachlorobenzene
4. Hexachloroethane
5. 2-Chlorophenol
6. 1,2-Dichlorobenzene
7. 1,3-Dichlorobenzene
8. 1,4-Dichlorobenzene
9. 2,4-Dichlorophenol
10. 2,4-Dimethylphenol
11. 2,4-Dinitrotoluene
12. 2,6-Dinitrotoluene
13. Fluoranthene
14. Hexachlorobutadiene
15. Nitrobenzene
16. 2-Nitrophenol
17. 4-Nitrophenol
18. 2,4 Dinitrophenol
19. 4,6-Dinitro-o-cresol
20. Di-n-butyl phthalate
21. Diethyl phthalate
22. Dimethyl phthalate
23. Benzo(a)anthracene
24. Benzo(a)pyrene
25. 3,4-Benzofluoroanthene
26. Benzo(k)fluoroanthene
27. Chrysene
28. Acenaphthylene
29. Anthracene
30. Phenanthrene
31. Pyrene
32. Acrylonitrile
33. Carbon Tetrachloride
34. Chlorbenzene

35. 1,2-Dichloroethane
36. 1,1,1-Trichloroethane
37. 1,1-Dichloroethane
38. 1,1,2-Trichloroethane
39. Chloroethane
40. Chloroform
41. 1,1-Dichloroethylene
42. 1,2-trans-Dichloroethylene
43. 1,2-Dichloropropane
44. 1,3-Dichloropropylene
45. Methylene Chloride
46. Methyl Chloride
47. Tetrachloroethylene
48. Trichloroethylene
49. Vinyl Chloride

This waiver is good only for the term of the permit.

Any request for continuation of this waiver must be submitted when applying for a reissued permit or modification of a reissued permit. The request must demonstrate through sampling or other technical information, including information generated during an earlier permit term that the pollutant is not present in the discharge or is present only at background levels from intake water and without any increase in the pollutant due to activities of the discharger.

An application for permit reissuance or modification must include Environmental Protection Agency (EPA) Application Forms 1 and 2C with characterization of all pollutants required by Item V in the EPA Application Forms 2C.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring results obtained during the previous monitoring period shall be reported on the monthly forms as provided, or otherwise approved, by the Department, and be received no later than thirty (30) days following the completed monitoring period. Unless otherwise specified, all toxicity test data shall be submitted within 60 days after the sample date. The report(s) shall be sent to:

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2. of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation.

2. The Permittee shall report any noncompliance that may endanger human health or the environment within 24 hours from the time the Permittee becomes aware of the noncompliance.

3. Submit a detailed written report to the Department within thirty (30) days (five [5] days for upsets and bypasses), unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

S4. OPERATION AND MAINTENANCE

A. The Operations and Maintenance Manual shall be kept available at the permitted facility and all operators shall follow the instructions and procedures of this manual.

B. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for Essential Maintenance without the Potential to Cause Violation of Permit Limits or Conditions.

   Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass.

2. Bypass Which is Unavoidable, Unanticipated, and Results in Noncompliance of this Permit.

   This bypass is permitted only if:

   a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. “Severe property damage” means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.

   c. The Department is properly notified of the bypass as required in condition S3E of this permit.

3. Bypass which is Anticipated and has the Potential to Result in Noncompliance of this Permit.

The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

C. Duty to Mitigate

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

S5. POLLUTION PREVENTION PLAN

Procedures currently employed by the Permittee to prevent or minimize the potential for release of pollutants to the wastewater treatment system, stormwater, and/or waters of the state shall be continued or maintained unless modified by the pollution prevention plan required below.

The Permittee shall develop a pollution prevention plan for sources of water pollutants and submit the plan for review and approval to:

Toxics Reduction Unit Supervisor
Hazardous Waste and Toxic Reduction Program
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

Hazardous Waste and Toxic Reduction Program will generally review and either approve (or conditionally approve), comment on, or disapprove the plan within the sixty-day period unless circumstances prevent, in which case the Permittee will be notified and informed of the reason for the delay.

A copy of the plan shall be submitted to:

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

The objective of the pollution prevention plan is to identify pollution prevention opportunities and implement those opportunities that are technically and economically achievable.

A. Plan Development and Implementation

The Permittee shall develop, implement, and comply with the pollution prevention plan in accordance with the following schedule:

1. Within one year of permit effective date, the Permittee shall develop a pollution prevention plan that addresses the Phase I requirements of Permit Condition S6.C. The plan shall be submitted to the Department for review and approval.

2. Within two years of permit effective date, the Permittee shall develop Phase II of the pollution prevention plan as required in Permit Condition S6.D. and submit it to the Department for review and approval.

3. The Permittee shall implement selected pollution prevention opportunities according to the timeframes specified in the plan or any plan modifications thereof.

Guidance used in developing a pollution prevention plan shall include the document Stormwater Pollution Prevention Planning for Industrial Facilities published by the Department of Ecology, the 'Pollution Prevention and Best Management Practices' section of the Ecology Permit Writer's Manual (Chapter XII.), the methodologies of the Pollution Prevention Planning Guidance Manual for Chapter 173-307 WAC, and other information provided by the Department. The Permittee is expected to apply the methodologies from the existing guidance to cover other sources, pathways, or measures not covered within the strict scope of the WAC 173-307 guidance. Other information available to the Permittee may also be used in preparing the plan.

The approved pollution prevention plan and any modifications to the plan shall be followed throughout the term of the permit.

B. General Requirements

1. Plan Retention and Record Availability. The pollution prevention plan shall be retained onsite or within reasonable access to the site. Staff training records shall be maintained onsite and be available for inspection.

2. Modifications. The Permittee shall modify the pollution prevention plan whenever there is a change in design, construction, operation, or maintenance of the facility which significantly increases the generation or potential generation of water pollutants or causes the pollution prevention plan to be less effective in controlling pollutants. The Permittee shall provide for implementation of any modifications to the pollution prevention plan in a timely manner.

   Modifications to the plan shall be submitted to the Department in the annual report required in Permit Condition S6.H.

C. Specific Requirements - Phase I

1. Description of Current Pollution Prevention Activities. The plan shall include a description of measures already employed at the facility to prevent, reduce, eliminate, or control releases of pollutants to influent wastewater streams, stormwater, and/or waters of the state.

2. Description of Potential Pollutants and Sources. The plan shall include a detailed description of the processes or activities that contribute or potentially contribute pollutants to influent wastewater streams, stormwater, groundwater, and wetlands. Minor incidental wastestreams to stormwater, such as landscaping fertilizers, do not have to be included. The plan shall identify the materials used, processed, stored, treated, or disposed of at the facility and the pollutants that are generated or potentially generated or released. The level of detail provided in the plan should be sufficient to help identify and understand how and why materials are used and pollutants generated or released. Process flow diagrams and/or material input/output information shall be included on a process unit basis.

   The Permittee shall include in the plan all materials which may become pollutants or cause pollution upon reaching state waters, including materials which, when spilled or otherwise released into the environment, would be designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070.

   In determining which sources and pollutants to address in the plan, the Permittee shall use available sampling data, as well as knowledge of processes and materials, and available information on the relative toxicity or hazard of materials.

3. Identification, Preliminary Evaluation, and Prioritization of Pollution Prevention Opportunities. The plan shall identify pollution prevention opportunities and provide a preliminary evaluation of each opportunity's technical (including safety considerations) and economic feasibility. Based upon this evaluation and other factors, the opportunities shall be prioritized. In ranking opportunities, the Permittee shall consider pollutant loading and toxicity and the potential to achieve the greatest reduction with respect to time and costs.

   The Permittee shall provide their rationale for how the pollution prevention opportunities are prioritized. In addition to technical and economical feasibility, other factors may influence ranking of opportunities and should be included in the discussion. These factors may include capital projects planned or ongoing at the facility that will provide a benefit to environmental media other than water, corresponding reduction in safety risks, etc. Projects that achieve higher overall environmental benefit shall have greater priority.

D. Specific Requirements - Phase II

In Phase II of the plan, the Permittee shall provide a detailed analysis of technical and economical feasibility for the top ten pollution prevention opportunities (if more than ten opportunities were identified), as prioritized in the approved Phase I submittal of the plan.

In evaluating and selecting pollution prevention opportunities, the Permittee shall give preference first to those that eliminate, avoid, or reduce the generation of water pollutants at the source, second to those that recycle or reuse the pollutants, and third to those that provide at-source or near-source treatment to remove pollutants or render them less toxic or harmful.

Opportunities determined to be technically and economically feasible will be considered as known, available, and reasonable and therefore **are required to be selected and scheduled for implementation**. For each pollution prevention opportunity selected, the plan shall identify the process(es) or activities it affects, an estimate of the annual amount of pollutants (by weight, for each pollutant affected) that can be reduced by the opportunity, and the environmental or other benefits that will be achieved.

The plan shall include a schedule for implementation of each selected opportunity. The Permittee is expected to establish reasonable priorities and schedules for implementation to achieve the greatest reduction in pollutant quantity and toxicity, as well as for management and fiscal necessity.

E. Considerations in Identifying, Evaluating, and Selecting Opportunities

1. In identifying, evaluating, and selecting pollution prevention opportunities for implementation, the Permittee shall consider the following:

   a. All reasonably expected activities and conditions, such as normal operations, maintenance, and other ancillary activities; equipment failure; improper operation; upsets, accidents, spills, leaks; and natural events such as rainfall, snowfall, etc.

   b. All areas of the facility with potential to generate water pollutants including process units, raw material and product storage, handling and transfer facilities, material handling areas, maintenance areas, solid and hazardous waste storage, treatment, and disposal, and stormwater systems

c. Cross-media shift of pollutants should be avoided, unless a clear net environmental benefit results, and compliance with standards applicable to other media or management programs would be maintained.

The Permittee shall not be required to sample each stream analytically and may use engineering judgment to assess material inputs and outputs on a process unit basis.

2. The following are examples of pollution prevention opportunities that may warrant evaluation:

a. Improving and/or establishing new management practices and standard operating procedures addressing: increased training or supervision; improvements in inventory control, materials and waste handling, general operations, and housekeeping; preventive maintenance; and remedial measures;

b. Process or equipment modifications, including re-engineering processes to use less toxic input materials or to utilize by-products;

c. Material substitution;

d. Reducing material inputs;

e. Recycle/reuse of waste, by-products, or process materials and fluids;

f. Application of water conservation methods, including water reuse;

g. Waste segregation and separation;

h. Alternative and/or enhanced treatment technology, including upstream treatment of pollutants.

Other pollution prevention opportunities referenced in guidance documents may also be considered.

F. Incorporating Other Pollution Prevention Plans

The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into the pollution prevention plan become enforceable requirements of this permit.

G. Plan Evaluation and Annual Reporting

1. The Permittee shall periodically evaluate the pollution prevention plan to ensure that it has been updated or otherwise modified to reflect current conditions, that measures to reduce or eliminate pollutant loadings selected in the plan are adequate and are being properly implemented in accordance with the terms of the permit, and whether any additional controls are needed. The plan shall be modified to include any changes as a result of this evaluation.

2. The Permittee shall submit a progress report within three years of permit effective date **and every year thereafter,** that reports on the plan activities of the previous calendar year. The report shall contain the following elements:

a. A list of the estimated amounts, by weight, of each pollutant identified in Permit Condition S6.C.2., released to the wastewater treatment system, stormwater, and/or waters of the state in the previous calendar year;

b. The implementation status of each pollution prevention opportunity selected for implementation;

c. The results of implementation actions performed in the previous calendar year (quantitative results shall be used whenever possible);

d. Any modifications or updates to the plan.

H. Continuous Improvement

In maintaining, implementing, and updating the pollution prevention plan, the Permittee is encouraged to employ continuous improvement principles, including the systematic and ongoing identification, evaluation, and implementation of pollution prevention opportunities in all decisions having environmental consequences.

S6. SPILL PLAN

The Permittee shall submit for review and approval an updated Spill Plan within 120 days of permit effective date to:

Compliance Unit Manager
Hazardous Waste and Toxic Reduction Program
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

A copy of the plan shall be submitted to:

Water Quality Permit Coordinator
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-7775

The Permittee shall review and update the Spill Plan, as needed, at least annually. Changes to the plan shall be sent to the Department as indicated above. The plan and any supplements shall be followed throughout the term of the permit.

S7. RECEIVING WATER MONITORING

The Permittee shall collect receiving water information necessary to determine if the effluent has a reasonable potential to cause a violation of the water quality standards. If reasonable potential exists the Department will use this information to calculate effluent limits. All sampling and analysis shall be conducted in accordance with the guidelines given in *Guidelines and Specifications for Preparing Quality Assurance Project Plans*, Ecology Publication 91-16.

The Permittee shall follow the clean sampling techniques (*Method 1669: Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*, EPA Publication No. 821-R-95-034, April 1995). The sampling station accuracy requirements are ± 20 meters. The receiving water sampling location should be at the cooling water inlet to the plant. The Department considers ten receiving water samples to be the optimal data set and four to be the minimum, for determining reasonable potential to cause a violation of the water quality standards. All chemical analysis shall be conducted according to methods given in 40 CFR 136 and shall have the following detection levels:

POLLUTANT PARAMETER	DETECTION LIMIT REQUIRED
bis (2-ethylhexyl) phthalate	1.0 µg/L
Arsenic	1.0 µg/L
PCB 1254	1.0 µg/L

Any subsequent sampling and analysis shall also meet these requirements. The Permittee may conduct a cooperative receiving water study with other NPDES Permittees discharging in the same vicinity. The Permittee shall submit the results of monitoring data obtained during each monitoring period as described in Section 3.A.

S8. ACUTE TOXICITY

A. Effluent Characterization

The Permittee shall conduct acute toxicity testing on the final effluent (Outfall 001) to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50% of the organisms (LC_{50}). The percent survival in 100% effluent shall also be reported.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

1. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F).

2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

1. The median survival of any species in 100% effluent is below 80%.

2. Any one test of any species exhibits less than 65% survival in 100% effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C. of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D. are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S1.B. of this permit. The ACEC equals 12 percent effluent.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall stop effluent characterization and begin to conduct the activities in subsection E even if the ACEC is unknown.

C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100% effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100% effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10%, the hypothesis test shall be conducted at the 0.01 level of significance.

D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the LC_{50} and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used, and results submitted to the Department as a part of the permit renewal application process.

F. Acute Rapid Screening Testing

In consideration of the Permittee's potential to have toxicity occur and cause receiving water impacts the following monitoring is required. The Permittee shall conduct 24 hour acute rapid screening tests using species below on a sample collected whenever untreated spills are discharged from Outfalls 001 or 002:

1. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (24-hour static test, method: EPA/600/4-90/027F).

A minimum of 20 organisms and 4 replicates shall be used in both the control and 100% effluent. Additional effluent concentrations may also be run. Tests shall have a maximum normalized mortality rate of 0.20 in 100% effluent. The mortality rate for an acute rapid screening test is determined in WAC 173-205-120(2)(b) by subtracting the number of test organisms living in 100% effluent from the number of test organisms living in the control and dividing the result by the number of test organisms living in the control.

When a rapid screening test results in a mortality rate greater than 0.20 in 100% effluent, the Permittee shall retest using the same species except that the test shall be run for 96 hours for fathead minnows and 48 hours for daphnids and be performed using a minimum of five effluent concentrations and a control. The permittee shall also actively investigate the source of toxicity. The toxicity test and investigation results shall be reported to the Department within 30 days of the rapid screening test failure.

G. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible, but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

S9. CHRONIC TOXICITY

A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent (Outfall 001). The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Chronic toxicity tests shall be conducted with the following two species and the most recent version of the following protocols:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	*Pimephales promelas*	EPA/600/4-91/002
Water flea	*Ceriodaphnia dubia*	EPA/600/4-91/002

B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C, of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S1.B. pursuant to WAC 173-201A-100. The CCEC equals 5% effluent.

C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A above on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the

additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

F. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.

2. Testing shall be conducted on grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.

4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.

5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.

6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include the ACEC and the CCEC.

8. All whole effluent toxicity tests, effluent screening tests, and rapid screening tests that involve hypothesis testing, and do not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, must be repeated on a fresh sample with an increased number of replicates to increase the power.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department.

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

> I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

G2. RIGHT OF INSPECTION AND ENTRY

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.

B. To have access to and copy - at reasonable times and at reasonable cost - any records required to be kept under the terms and conditions of this permit.

C. To inspect - at reasonable times - any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.

D. To sample or monitor - at reasonable times - any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.

2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.

3. A material change in quantity or type of waste disposal.

4. A determination that the permitted activity endangers human health or the environment or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].

5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].

6. Nonpayment of fees assessed pursuant to RCW 90.48.465.

7. Failure or refusal of the permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the permittee requests or agrees:

1. A material change in the condition of the waters of the state.

2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.

3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.

4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.

5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.

6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.

2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least one hundred eighty (180) days prior to the planned start of construction unless a shorter time is approved by Ecology. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars ($10,000) and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars ($10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort, or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

G21. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

G23. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

G24. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. One hundred micrograms per liter (100 μg/l).

2. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.

3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"

1. Five hundred micrograms per liter (500μg/L).

2. One milligram per liter (1 mg/L) for antimony.

3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).

4. The level established by the Director in accordance with 40 CFR 122.44(f).

G25. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.